

ARMORACIA LACUSTRIS (BRASSICACEAE), THE
CORRECT NAME FOR THE
NORTH AMERICAN LAKE CRESS

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A new combination is proposed for the North American lake cress. A county distribution map is included.

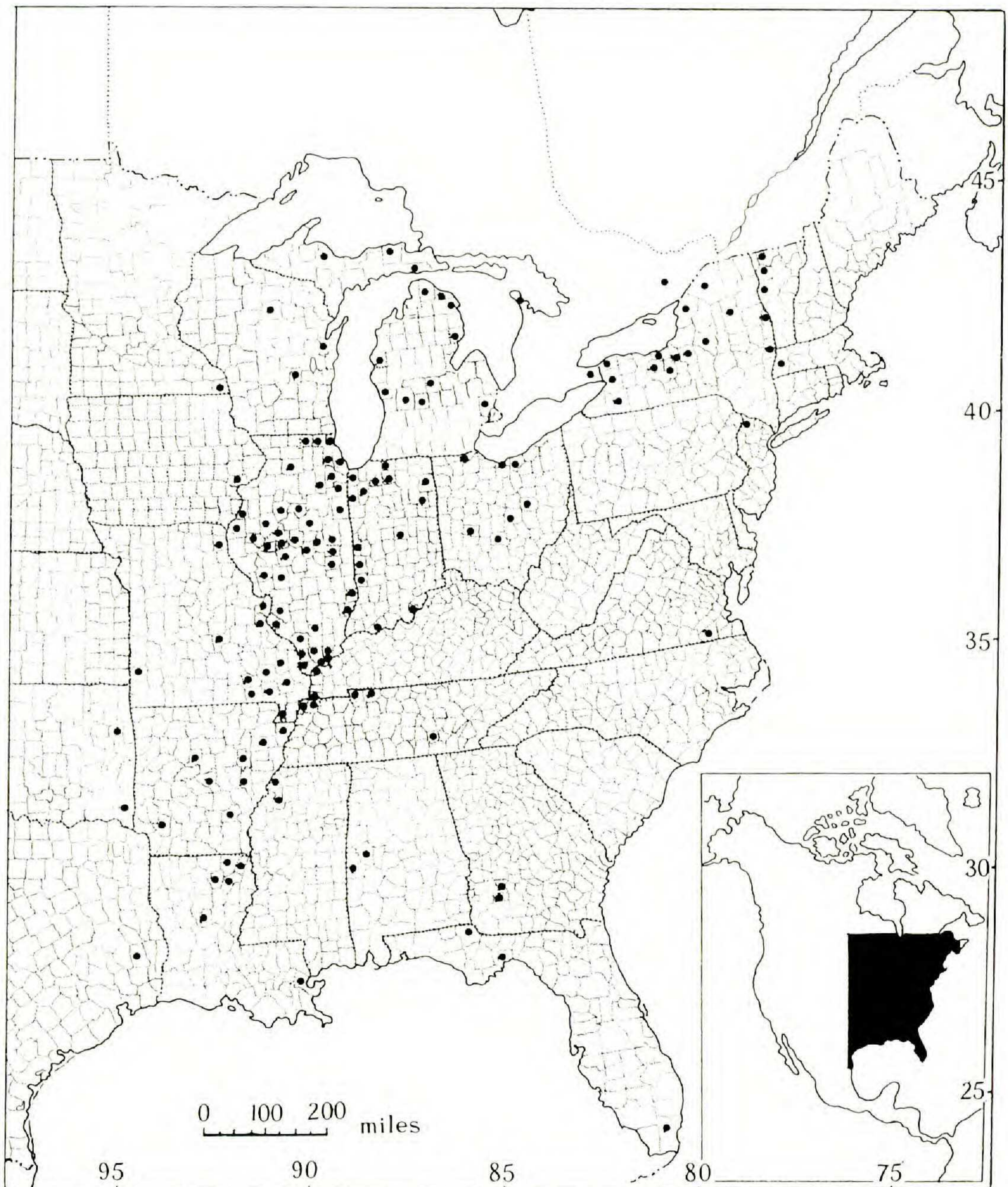
Lake or river cress is one of the most remarkable heterophyllous North American aquatic plants. It grows in quiet waters of lakes, ponds, streams, rivers, and springs, as well as on flood plains, mud flats, and muddy shores. Any part of the root, stem, or leaf is capable of regenerating a new plant. The species is widely distributed in North America east of the 95th meridian from Wisconsin and Michigan eastward to Quebec and northwestern Vermont, southward to Florida, westward to eastern Texas, and northward to eastern Oklahoma, Missouri, eastern Iowa, and southeastern Minnesota (see MAP). Despite its perennial habit, its regenerating ability, and its apparent wide distribution, the species is not very common anywhere. In the northern parts of its range, it has very rarely been collected with good fruits and seeds and appears to regenerate and reproduce primarily asexually (La Rue, 1943).

The nomenclature of lake cress, *Armoracia lacustris* (which now replaces *A. aquatica*), has been confused at both the specific and the generic ranks. Eaton (see below) originally described it as a variety of horseradish (*A. rusticana* Gaertner, Meyer, & Scherb., as *Cochlearia armoracia* L.) but later recognized it as a distinct species of *Cochlearia* L. Other authors treated it as a species of *Nasturtium* R. Br., *Rorippa* Scop., *Neobeckia* Greene, *Radicula* Moench, or *Armoracia* Gaertner, Meyer, & Scherb. Under the last genus it has been known as *A. aquatica* (Eaton) Wieg., but this is a later homonym of *A. aquatica* Kostel. The latter is a synonym of *Rorippa amphibia* (L.) Besser, an entirely different Eurasian species. Therefore, the specific epithet *aquatica* cannot be used for the North American plant under the genus *Armoracia*. A new combination based on *Nasturtium lacustre* A. Gray is proposed.

Armoracia lacustris (A. Gray) Al-Shehbaz & V. Bates, comb. nov.; based on *Nasturtium lacustre* A. Gray, Gen. Pl. U. S. 1: 132. 1848. TYPE: same as that of *Nasturtium natans* DC. var. *americanum* A. Gray. Gray cited no specimens under *N. lacustre* but listed this varietal name as a synonym.

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County distribution map of *Armoracia lacustris*.

Cochlearia armoracia L. var. *aquatica* Eaton, Man. Bot. N. Amer. ed. 3. 243. 1822.

TYPE: Massachusetts, Berkshire County [*A. Eaton s.n.*, not seen].

Cochlearia aquatica (Eaton) Eaton, Man. Bot. N. Amer. ed. 5. 181. 1829.

Nasturtium natans DC. var. *americanum* A. Gray, Ann. Lyceum Nat. Hist. New York 3: 223. 1835. LECTOTYPE (here designated): W. New York, Oneida Lake [*A. Gray s.n.*] (GH!).

Armoracia americana (A. Gray) Hooker & Arnott, Brit. Fl. ed. 6. 28. 1850.

Rorippa americana (A. Gray) Britton, Mem. Torrey Bot. Club 5: 169. 1894.

Neobeckia aquatica (Eaton) Greene, Pittonia 3: 95. 1896.

Radicula aquatica (Eaton) Robinson, Rhodora 10: 32. 1908.

Armoracia aquatica (Eaton) Wieg. Rhodora 27: 186. 1925; non *A. aquatica* Kostel. Allg. Med. Pharm. Fl. 5: 1571. 1836.

Rorippa aquatica (Eaton) Palmer & Steyer. Rhodora 40: 132. 1938.

A few authors have questioned the placement of *Armoracia lacustris* and *A. rusticana* in the same genus, and Rickett (1967, p. 236) stated that they "seem to have nothing in common except that they are both crucifers." Schulz (1936) treated the former species as a *Nasturtium* (sect. *Rorippa* (Scop.) Prantl) in the tribe Arabideae DC. and retained the latter in *Armoracia*, which he placed in the tribe Drabeae O. E. Schulz. In our opinion, both species share a number of characters (e.g., white flowers, biserially arranged seeds, incomplete septum, oblong to ovate fruits, dissected lower leaves) that support their disposition in *Armoracia*, as was proposed by Wiegand (1925).

ACKNOWLEDGMENTS

We are grateful to Reed C. Rollins for a critical review of the manuscript, to Elizabeth B. Schmidt and Stephen A. Spongberg for their editorial advice, and to Barbara Nimblett for typing the manuscript.

LITERATURE CITED

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- RICKETT, H. W. 1967. Wild flowers of the United States. The southeastern states. Vol. 2, part 1. x + 322 pp. McGraw-Hill, New York.
- SCHULZ, O. E. 1936. Cruciferae. In: A. ENGLER & K. PRANTL, Nat. Pflanzenfam. ed. 2. **17B**: 227-658.
- WIEGAND, K. M. 1925. Some changes in nomenclature. *Rhodora* **27**: 186, 187.